

### REMARKS

Claims 2-6, 8-13, 16-18, 20-22, 25-29, and 32-35 are pending after entry of the present amendment.

In the Office Action dated July 29, 2008 the Examiner rejected claims 2-6, 8-13, 16, 18, 20, 22 and 26-29 under 35 U.S.C. 103(a) as being unpatentable over Don Pannell "Clause 22 Access to Clause 45 Registers" (the "Pannell article") in view of Law et al.; "IEEE P802.3ae 10Gb/s Ethernet MDC/MDIO Proposal (the "Law article") and Nick Parlante "Pointers and Memory" (the "Parlante article"). Claim 21 was rejected under 35 U.S.C. 103(a) as being obvious over the Pannell article, in view of the Law article and the Parlante article, and further in view of U.S. Patent No. 5,872,989 to Tsushima et al. (the "Tsushima patent"). Claim 25 was rejected under 35 U.S.C. 103(a) as being obvious over the Pannell article, in view of the Law article and the Parlante article, and further in view of U.S. Patent No. 5,694,587 to Webb et al. (the "Webb patent").

As an initial matter, Applicant notes the claim amendments and cancellations made in Applicant's March 13, 2008 amendment responsive to the Examiner's indication of allowable subject matter. As the Examiner has now issued new rejections, Applicant has made certain amendments and added new claims in part to restore the claims to their status prior to Applicant's March 13, 2008 amendment. In particular, new Claim 30 corresponds to previously pending Claim 1, new Claim 31 corresponds to previously pending Claim 7, new Claims 32-33 correspond to previously pending Claims 14-15, new Claim 34 corresponds to previously pending Claim 17, new Claim 35 corresponds to previously pending Claim 19. The claims have also been amended to more distinctly claim embodiments of the invention.

The Pannell reference has been applied by the Examiner. The Pannell reference describes "a standard way to access Clause 45 registers using Clause 22". *See* page 5. The Pannell reference notes the urgency of the matter because "there are only 2 unused Clause 22 registers left." Accordingly, Pannell proposes using Clause 22 Register 13 as a Clause 45 command register and using Clause 22 Register 14 as a Clause 45 address/data register. *See* page 6. Pannell then specifies how to map the format of a Clause 45 register into a Clause 22 register. *See* pages 12-13. The Clause 45 protocol may accommodate an address, read, write, or

read increment command pertaining to any one of the 64K registers per device. *See* page 7. Accordingly, the Pannell reference describes a mechanism where a Clause 22 register can be used to perform the Clause 45 set address, read, write, or read increment functions. However, the register itself acts only on a single element, with a possible pointer increment ability. The Pannell reference does not describe a register capable of selecting a block of registers. The Examiner points to the “Addr Reg” block of Pannell’s page 14. *See Office Action*, page 3. However, the “Addr Reg” contains an address corresponding to one of the 65,636 registers shown. The “Addr Reg” therefore indicates a single register, and does not itself indicate a block of registers.

The Law reference has also been applied by the Examiner. The Law reference describes an indirect addressing proposal supporting four access types – address, write, read, and post read increment address. *See* slide 9. The Law reference specifies that registers contain information about a single address to be accessed. *See* slide 10 (“address to be accessed”). The Law reference does not disclose referencing or accessing a block of registers.

The Parlante reference has also been applied by the Examiner. The Parlante reference discloses how pointers and memory work. *See* Abstract. Parlante does not make up for the deficiencies of the Pannell and Law references described above.

Claim 26 is patentable at least by calling for a method for expanding addressing capability of a plurality of registers. The method includes designating at least two of the plurality of registers as a block of registers, providing a plurality of such blocks of registers, designating a first register within the plurality of registers that is separate from the blocks of registers for selectively characterizing at least one of such blocks of registers as an indicated block of registers, such that any of the registers of the indicated block of registers may be addressed without adjusting a pointer.

The cited references fail, alone or in combination, to disclose a register that selectively characterizes a block of registers. Instead, and as discussed above, the references describe operating on a single element with information stored in the register. By so indicating a block of registers, independent Claim 26 recites “any of the registers of the indicated block of registers may be addressed without adjusting a pointer.” This capability would not be provided by the

Law or Pannell references, either alone or in combination, because they specify operations on a single register.

Independent Claim 26 is additionally patentable at least by calling for a method including designating a first register where the first register is compatible with IEEE standard 802.3 clause 22 and designated by the standard as available for vendor specification. The first register includes a pointer to a plurality of location registers that each indicates at least one of the blocks of registers. The method further includes designating a second register within the plurality of registers that is separate from the blocks of registers for specifying at least one operation for the indicated block of registers. The second register is compatible with IEEE standard 802.3 clause 22 and designated by the standard as available for vendor specification. The second register includes a pointer to a plurality of control registers in which each control register includes an operational code. The method further includes associating the plurality of location registers with the plurality of control registers such that a first operational code is associated with a first of such blocks of registers and a second operation code is associated with a second of such blocks of registers.

The cited references fail, alone or in combination, to disclose first and second registers of the type recited in Claim 26 that are compatible with IEEE standard 802.3 and designated by the standard as available for vendor specification. The Examiner instead relies on Law and Pannell registers that are IEEE standard 802.3 clause 22 registers that are specified by the standard itself. *See* Law, slide 5 and Pannell slide 6 indicating that registers 13 and 14 are used). Parlante, directed to pointers, does not make up for the deficiencies of the Pannell and Law references. By using registers available for vendor specification, embodiments of Applicant's invention may not interfere in any way with registers having a function specified by the IEEE standard 802.3 clause 22. Accordingly, for at least these reasons, Applicant respectfully submits that the combination of limitations recited in independent Claim 26 is patentable over Pannell in view of Law and Parlante.


In an analogous manner, independent Claims 30 and 31 are patentable by calling for recites in part "any of the registers of the indicated block of registers may be addressed without adjusting a pointer," and a control and location register that are "compatible with IEEE standard 802.3 clause 22, and designated by the standard as available for vendor specification." Accordingly, for at least this reason, and for the additional combination of limitations in independent Claims 30 and 31, Applicant respectfully submits that Claims 20 and 31 are patentable over Pannell in view of Law and Parlante.

Dependent claims 2-6, 8-13, 16-18, 20-22, 25, 27-29, and 32-35 are patentable over the applied references at least for the reasons described above with regard to the independent claims and for the additional limitations recited in the claims. For brevity, Applicant has chosen here to not separately argue patentable dependent claims. Applicant's silence should not be interpreted as belief that the dependent claims are patentable only because of their dependence on a patentable independent claim.

Applicant submits all pending claims are in condition for allowance. Favorable consideration and a timely Notice of Allowance are earnestly solicited. The Examiner can reach the undersigned at (206)903-8836 should a telephone conference be helpful.

Respectfully submitted,

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